#2

An Inaugural Dissertation

on

Dysentery:

Submitted to the examination of

Provost

The Trustees and Medical Professors of

the University of Pennsylvania

For the Degree of Doctor of Medicine

On the day of A.D. 1811

By John G. Lansing, A. B.

of Albany, New York.

the
=ei
the
a g
=sh
of a
v. pri
be
=ing
an
ex

mo
ag
the
its

Upon a subject which has employed the pens of the ablest and most enlight=ened authors from Hippocrates down to the present day, it cannot be expected that a young man just issuing from his student=ship, and inexperienced in the Phenomena of diseases, should throw much new light. The principle merit of this essay (if any should be attached to it) shall consist in its bring=ing into a concise view the knowledge the author has derived from the writings and experience of others.

The dysentery is a disease which has made its appearance even in the remotest ages of antiquity; Numerous have been the failures of the best concerted plans from its influence, and the different countries

of
son
=tne
he
hu
Th
=inf
tho
=cee
mo
3
sam
=oz
the
tim
the

of Europe still lament the loss of her brave sons who have fallen victims to this dis=
=tructive disease. Sydenham and others have considered it as a Remittent or Intermittent fever turned upon the bowels. This may be infered 1st From its appear=
=ing in the same season of the year at which those fevers usually appear. 2d From its suc=
=ceeding similar circumstances in the at=
=mosphere to those which precede these fevers. 3d From its being accompanied with the same symptoms which usually character=
=ize those fevers. 4th From its alternating with them, and its being Epidemick at the same time and place with them.

The word dysentery is derived from the Greek word Δυσεντερια, which is derived

from
inte
= mer
it P
the
then
he t
used
acco
muc
this
that
any
dise
in th
mon
aspe

from Δυσ with difficulty and εντερα the intestines, importing a difficulty or derange=ment in the functions of those organs. By it Hippocrates signified an ulceration of the intestines and all bloody discharges from them. Galen followed him in his error. In the time of Celsus the word Tormina was used to signify an ulceration of the intestines accompanied with tenesmus, griping, and mucous, and bloody stools; he then adds that this was the dysentery of the Greeks. So that Celsus was the first who gave ~~any~~ any thing like a precise character of this disease. It generally makes its appearance in the last summer or first autumnal months; though Sir John Pringle says, it may appear at an earlier period, but accom=

panied u

thos

comm

lows

great

Flatu

the Pl

subst

back

some

of dia

pane

stage

by th

2d. F

from

=panied with much milder symptoms than those which attend the dysenteries which come on at a later period. It commonly fol=
=lows wet and cold weather succeeding to great heat. Its premonitory signs are, 1st. Flatulency, supposed to be derived from the Putrefaction of the blood, mucus, and other substances in the prima via: 2d Pains in the back and loins: 3d Mucilaginous stools: 4. It sometimes comes on with the symptoms of diarrhea: 5th It is most generally accom=panied with symptoms of the forming stage of fevers. When formed it is known by the following symptoms. 1st Gripes: 2d Stools. These are different and proceed from different causes. 1st Blood and mucus.

The blo
=tur
it i
the
low
equ
the
gd
=pro
ha
con
=br
and
inclo
pro
me
dec

The blood is supposed to be derived from a rup=ture of the vessels of the Intestines. Sometimes it is in small quantities and is streaked on the mucus: it is then said to come from the lower intestines; but when it appears more equally diffused, it is said to be derived from the upper intestines. 2d Blood and faces. 3d Faces, blood and mucus. 4th Scibellæ, sup=posed to be derived from the Colon after having been confined in its cells by the constriction in those parts. 5th A mem=brane formed by the coagulable lymph, and supposed to be the consequence of inflammation from the resemblance it bears to the membrane found in the Trachea after death from Cynanche Trachealis.

6th

sup

=per

lun

=pu

tu

=tun

=han

=ni

=ver

In th

"the

"the

"of a

="gre

"dis

6th The serum of the blood. Sir John Pringle suppose this to be derived from the upper part of the intestines. 7th Balls like lumps of cheese, which Doctr Hunter supposes to be the first discharge from the tubercles which are found in the intestines after death. 8th Worms. Doctr Sydenham describes a dysentery unaccompanied with stools, but attended with severe gripings and considerable fever. In this case, "It is probable that the force of" "the disease in the bowels first prostrates" "their action so as to prevent the discharge" "of any of the contents of the intestines, a" "greeably to the analogy of several other" "diseases. Perhaps this form of intestinal

"dise
Some
in
seiz
swa
or leg
as i
thro
to th
by w
the
the
=pow
sym
the
to th
a pu

"disease may be called a dry dysentery."
Some authors have described a dysentery
in which the patient is immediately
seized with a desire to go to stool upon
swallowing any thing whether solid
or liquid, accompanied with a sensation
as if what was swallowed was running
through the bowels. This is to be attributed
to the great irritability of the intestines,
by which an impression made upon
the stomach is propagated throughout
the whole alimentary canal. This af-
=fords a striking example of the great
sympathy which prevails between ~~the~~
the stomach and the intestines down
to the rectum. Some authors describe
a procidentia ani and a strangury

as sy
conse
arise
-ing
blac

the
imp
I sha
I hav
this
Hun
-tracte
appe
-tract
after
and

as symptoms of this disease. The first is the consequence of the violent straining; the 2d arises from the inflammation, spread=ing from the rectum to the neck of the bladder.

As the morbid appearances of the bowels after death tend greatly to improve our knowledge of this disease, I shall avail myself of the information I have been able to obtain from books on this subject. Upon a first view, says Doctor Hunter, the bowels appear irregularly con=tracted, particularly the colon: and they appear redder than is natural at the con=tracted part. Upon a nearer inspection, after having cut out part of the intestine, and upon examining the inner coat, the

appe
ave
some
a le
diffe
neav
tuber
than
then
come
a su
pres
ami
subst
lar
the o
roug
quen
appe

no n
whal

appearance of disease becomes more obvious. There are then to be seen tubercles like pustules sometimes in a greater and some times in a less number. They appear different in their different stages. Their progress appears to be nearly as follows: there is first a small round tubercle of a reddish colour, and not more than one tenth of an inch in diameter; it then encreases and becomes paler as it becomes larger. In this stage there appears a small crack on the top with a slight depression which gradually encreases. Upon examination it is found to contain a cheese like substance, and is seated between the muscular and villous coats of the intestine. As the opening becomes larger the base becomes rough, and discharges a matter which is frequently tinged with blood. They some times appear single though frequently in clusters.

Sometimes the intestines show no marks of disease. This is in consequence of what has been called the dry dysentery.

intest
=ter se
he di
He fa
which
has o

=ny co
The i
abroad

(
faith
=ted t
on the
mente
this d
which
=vy is
escap
=quish
but f

Sometimes it has been said that the intestines exhibit marks of gangrene. Dr. Hunter says that in all the dissections he made he did not discover this appearance in one. He further remarks that the appearance which arises from extravasation of blood has often been mistaken for gangrene.

Doctor Clark mentions that in many cases the liver and spleen were diseased. The inner coat of the intestines has been found abraded.

Diagnosis. After having a minute and faithful history of the disease as I have collected it from the most approved authors on the subject, it will become necessary to mention some characteristic marks by which this disease may be known from others with which it may be confounded. The dysentery is not likely to be mistaken for any disease except it be Diarrhoea. From this it may be distinguished by its being accompanied with small but frequent stools of a slimy and frothy mat-

2d

-pany
not
-com
whil
suff
dis

dyse
any
-posit
Sycl
allog
-ich
-tes se
-er de
the
Thu
with
with
in th

2d By the tenesmus and griping which accompany it. 3d By the bloody stools, though these are not always present. 4th By the fever which accompanies it. 5th The dysentery is contagious while the diarrhœa is not. These marks serve sufficiently to distinguish it from all other diseases.

Remote Cause. By the remote cause of dysentery I mean any thing which acting on any part of the body produces a debility or predisposition to disease in the intestines. Doctor Sydenham seems to refer the cause of dysentery altogether to the air and calls it an "Epidemick constitution of the atmosphere". Hypocrates seems to derive it from the state of the weather during the winter and spring preceeding the summer in which the dysentery prevails. Thus, says he, After an unusually dry winter with northerly winds, if a rainy spring succeed with southerly winds, dysenteries will prevail in the summer.

The causes to which dysentery is ex

is most commonly attributed in modern times are 1st Great heat preceding cold and moist weather: this acts by stopping perspiration, and giving the acrid fluids a centripetal direction - 2d The want of vegetable aliment, and also the want of a moderate quantity of fermented liquor. 3d want of cleanliness. 4th The use of putrid meat and water. Doctor Hunter mentions that in the island of Jamaica the water becomes quite putrid before it is drank; owing to its being kept in cisterns in which millions of insects breed. We can easily imagine that such water when drank may induce debility of the intestines to which it is immediately applied - 5th Thoino and Ideo mi-asmata. Any of the causes already mentioned acting upon the system may produce the predisposing cause or debility in the intestines.

The system being now primed for disease, the application of any of the <u>Exciting Causes</u> may produce dysentery. But, it may be asked, why should the exciting cause produce dysentery in preference to a more general disease, as

Inter
to be
be v
there
it is
=my
as is
grea
pear
purp
the
The
are
remo
mate
brou
and

=pear
=ie wi
an in

Intermittent or Remittent fever, since both are said to be derived from the same causes? he reply It may be remarked that the exciting causes often do induce these fevers; and that when they produce dysentery it is to be referred to a law in the animal Oeono=my. viz: That diseases attack the weakest parts, as is the case in Gout, which most frequently attacks the great toe; and also in creating an artificial weak part, as has been done in mania by frequent purges. the excitement becomes translated from the brain to the intestines and creates a diarrhœa. The most general exciting causes of this disease are a repetition of the application of any of the remote causes already mentioned; also Noxio and Ideo miasmata, Intoxication, distress of mind. It has been brought on by purges. The smell of putrid meat and putrid blood have induced it.

Cure. The dysentery sometimes ap=pears in so mild a form that a gentle cathart=ic with an opiate after its operation will put an immediate stop to its progress.

But
tedious
the sea
and the
B
-dy in
phl
and p
other
be dele
of the
ing E
to tuen
-ed in
fever
Cath
the gre
Next
antipl
the gr
choice
-u in

But in the majority of cases the cure is more tedious and difficult, and is to be regulated by the season of the year, the state of the system, and the symptoms present.

Blood letting is a safe and necessary remedy in many cases of dysentery. It removes the phlogistic diathesis and reduces the pain and pulse in a shorter time than any of the other antiphlogistic measures. The use of it must be determined by the pulse and constitution of the patient, and by the nature of the prevailing Epidemick. Doctor Rush has bled from one to twenty two times in a dysentery which prevailed in this city at the same time with yellow fever –

Cathartics. These are the remedies, upon which the greatest reliance is to be placed, in this disease. Next to blood letting they are the most powerful antiphlogistics, and they afford immediate relief from the griping and other symptoms. As to the choice of purges there seems to be nothing specific in the action of them. It is only necessary

that
=ly. Th
sweet
and
=phur
lover
=tion
high
from
ment
Rheul
this
of Su
=dition
the R
Vomi
as an
Morel
them
such
=ted, bu
=reve

that they operate easily, speedily and effectual=ly. Those which have been preferred are castor oil, sweet oil, fresh butter, milk, fresh butter, vinegar and molasses, The Super Tartrite of Potash, and Sul=phur when the disease seems seated in the lower bowels. The sulphate of Soda in combina=tion with manna has of late been thought highly of by the writers on dysentery, and from its posessing the qualities I have above mentioned I have no doubt of its efficacy. Rhubarb and calomel have long been used in this disease, and seem to have been the favorite of Sir John Pringle: he supposed that the ad=dition of calomel rendered the operation of the Rhubarb more mild.

Vomits have of late years fallen into disuse as antidysenteric medicines. Though Doctor Morely placed his principal reliance upon them. he used them as diaphoretics. That the sick are somewhat relieved by them cannot be dispu=ted, but the benefit is not so great as that de=rived from purgatives; which are more

easy a
the se
very a
cial u
=ly the
a view
=ted gl
highl
of anti
- Doctor
with a
=ful in
with a

only
=cyto s

enum
= men
=ting ex
=diate
freque

easy and effectual in their operation. Besides the sickness produced by an emetic is often very distressing, and it proves most beneficial when it proves purgative; and accordingly they have been used in small doses with a view to their purgative effects. The cerated Glass of antimony and James's Powder have been highly recommended: but Ipecac. and Tartrite of antimony have been found equally useful. Doctor Barton has found Ipecac: combined with opium and creta to be singularly useful in that kind of dysentery accompanied with bloody stools.

But emetics as emetics are only proper when nature shews a tendency to relieve herself by the stomach

<u>Blisters</u>. After the remedies already enumerated have failed, blisters to the abdomen have an excellent effect in translating excitement to the skin. They give immediate relief to the gripings, and deminish the frequency of the stools.

Opia
which
use o
=bilit
of ev
=tes m
from
" hu
=tes
artic
of bl
mala

= lia
= thou
er. t
may
= ly c
large
chur
= sist
gruel,

Opiates. There is no part of the practice concerning which authors are more divided than in the use of opiates in the dysentery. Their early exhibition has I believe met the disapprobation of every experienced practitioner. Hippocrates mentions the evil consequences resulting from stopping a flux too soon in these words: "Intempestive suppressa intestinorum difficultas abscessum in costis aut in visceribus aut articulis inducit." Galen also mentions vomiting of blood, Epilepsy, dropsy, and a number of other maladies.

Sydenham placed his principal reliance upon them; While others of great authority condemn them, though not altogether. It is almost universally agreed that they may be used after the bowels have been thoroughly cleansed. They are now to be given in large doses during the ~~na~~ night, and small during the day. Diet. This should consist of mucilaginous vegetables, as Barley gruel, Sago, Panada, pudding, and light broths.

The
natu
of he
and

is pr
-tory
ocum
is to
thos

-ed
time
obse
me
your
the
you

The drinks should also be of a mucilaginous nature, as Rice water. barley water. decoction of hartshorn. and a decoction made of starch and gum arabic.

What has hitherto been said of the cure is principally applicable to the inflammatory stage of this disease. But it sometimes occurs in a Typhoid or Typhus form, and is to be treated in the same manner as those states of fever are treated –

Having now, Gentlemen, finished what my feeble abilities, and the short time allotted to me, would permit me, to observe on the subject of dysentery, Allow me to tender you my warmest wishes for your future happiness and welfare, and for the prosperity of the institution over which you Preside.